

Review Comments
Source Control Evaluation/Voluntary Cleanup Report
Former Crown Cork and Seal Facility
10200 North Lombard Street
Portland, Oregon
Document Dated August 25, 2015

Submitted October 15, 2015

Following are the United States Environmental Protection Agency's (EPA) comments on the August 25, 2015 document entitled, Source Control Evaluation/Voluntary Cleanup Program Report (SCE Report) for the Former Crown Cork and Seal Facility, 10200 North Lombard Street, Portland, Oregon prepared by URS Corporation (URS). This facility is listed as ECSI # 5864, located at RM5E, within the southeast portion of the Geographic Region T4/International Slip, and is upland from the T4, Slip 3 area.

EPA understands the assessment activities presented in the report were conducted to characterize site conditions for use in evaluating the potential risks associated with contamination at the former Crown Cork and Seal facility. Included in this assessment was an evaluation of stormwater and groundwater pathways, which is the focus of this review with regards to recontamination risk to the Willamette River.

General Comments

1. Based on the documented information, EPA recommends that consideration be given for additional investigation of the fate of stormwater runoff on the western portion of the site. If a complete stormwater pathway to the Willamette River is identified, subsequent stormwater sampling and characterization is recommended to determine whether source control measures (SCMs) are necessary to reduce potential for stormwater from this facility recontaminating the Willamette River. This recommendation is based on the inadequate characterization of stormwater flows on the western portion of the facility, resulting in uncertainty regarding whether or not this site is a potential contaminant source.
2. This relatively large site has a limited groundwater monitoring well network focused primarily in the northeast area of the site. Groundwater elevation and chemistry data obtained from three events in the 2012 to 2015 timeframe are used in conjunction with simple chemical transport models to demonstrate the groundwater pathway poses no threat to the Willamette River. However, the document is lacking an explanation for the concentration of 1, 1-DCE in groundwater at MW-4. The report states that there are no ongoing sources of VOCs at the site. The 1,1-DCE concentration observed at MW-4 (74.5 to 109 micrograms per liter) and the approximately 80 foot thick vadose zone suggests uncertainty whether an uncharacterized source is present upgradient from MW-4.

Specific Comments

1. Section 3.4.1 Stormwater, Pages 8-9:
 - a. The fate of stormwater runoff generated from the western portion of the site should be clearly described. This includes the undeveloped wooded area as well as the area adjacent to the Union Pacific Rail Spur. Figure 5 depicts stormwater flows on the developed eastern portion of the site, but does not adequately map stormwater flows on the western portion of the facility. Outfalls 1 and 2 are described as no longer existing, but the fate of the stormwater that was formerly drained by these outfalls is not adequately characterized. The “Rail Spur Sump” and “Overflow Catch Basin” depicted in Figure 6 should be further investigated to identify connections and stormwater sources.
 - b. Complete infiltration of stormwater was observed during a September 2014 rainfall event, but complete infiltration may not occur when soils are saturated during the wet season. Section 2.1 indicates that the lowest elevation at the facility is 80 feet above mean sea level (ft. msl) on the western portion of the site, suggesting some flow is likely to drain to this elevation. A more complete characterization of flows in this area is warranted to determine whether a pathway exists between the site and the Willamette River.

2. Section 5.2 Sources of Contamination, Pages 16-17: The first sentence states, “Crown’s operations at the site ceased in 2011 and the facility was decommissioned in 2013. Therefore, there are no current operations or sources of contamination at the site.” Clarify this statement by stating there are no current operations creating ongoing sources of contamination at the site.

The last paragraph in this section discusses identified and potential source areas and states that “other potential historical sources of contamination listed above do not appear to have significantly impacted the site since concentrations of COIs [contaminants of interest] in soil samples collected in other areas of the site were below applicable RBCs [risk-based concentrations].” The presence of 1-1 DCE in groundwater in monitoring well MW-4 suggests an unidentified contamination source upgradient of MW-4.

3. Section 5.3.2 Groundwater, Page 18: The last sentence in the second paragraph states, “The stable to decreasing concentrations suggest that there are no ongoing sources of VOCs at the site.” EPA concurs there is no ongoing sources being added to the subsurface; however, the concentration of 1-1 DCE at monitoring well MW-4 suggests a potential unidentified contaminant source upgradient of MW-4.
4. Section 6.0 Contaminant Fate and Transport, Pages 19-20: This section discusses the BIOSCREEN and BIOCHLOR chemical transport models used to assess whether downgradient groundwater concentrations at potential surface water discharge points may be above applicable Screening Level Values (SLVs). Because EPA was unable to replicate the modelled results (particularly for 1-1 DCE), it is not clear from the text whether the input values for the model parameters are consistent for each chemical simulation. The document reports a full suite of input values for arsenic as two screen shots in Appendix H of the report. For each chemical simulated, please provide the input values for the model parameters below:
 - Source thickness in saturated zone
 - Source zone width
 - Modeled area width
 - Dispersivity alphas

5. Section 10.1 Stormwater Pathway Evaluation, Page 24: The first paragraph states that there is no outlet to the Rail Spur Sump. However, Section 3.4.1 states that outlet pipes were not observed above the level of standing water. The water in this sump should be pumped so that the existence of an outlet pipe can be further investigated. In addition, potential stormwater sources to the Overflow Catch Basin should be described in the SCE Report along with an estimate of when discharge to OF-2 may occur (i.e., design storm analysis).
6. Section 10.2 Groundwater to Surface Water Pathway Evaluation, Pages 24-25: As noted in Specific Comment No. 4, EPA was unable to replicate the groundwater chemical transport model results (with the exception of arsenic) and therefore cannot concur with the prediction that the chemical concentrations would attenuate to levels below applicable screening criteria before discharging to the Willamette River.
7. Section 11.1.1 Voluntary Cleanup Program Conclusions, Page 25: The first bullet states that no ongoing sources of contamination have been identified. As noted in Specific Comment No. 2, it is unclear as to whether there is an unidentified contaminant source upgradient of MW-4.